The Benignant Agency of Construction in the Courts

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This paper takes its title from the text of a decision, *Ex parte* Pacholder, rendered by Commissioner Mitchell in 1890 recommending the granting of claims fully commensurate with the scope of an invention by the employment of words "means," "mechanism," and "appliances" expressed therein. While the requirement of the statute, that the office of the claim is to particularly point out and distinctly claim the part, improvement, or combination which the applicant claims as his invention, is recognized in this decision, yet a liberal construction and allowance of claims for a novel and meritorious invention is urged by permitting the use of such terms of broad inclusion. As stated in the decision:

> "No general rule can be laid down for governing the employment in the claims of patents of such words as those under consideration. It is the object of the law, as it is the solicitude of the Office, to protect inventors and guard their inventions. This object is best secured in the case of patents which represent the maturity of the art by taking care that claims shall be drawn with all reasonable restrictions so that they shall be valid in spite of everything that is contained in existing patents and of everything previously known and used. In the case, however, of patents which represent the infancy of an art or the stage of its earliest practical development this Office is equally solicitous that the inventor should be

> accorded a breadth of claim which is commensurate with the extent and importance of the invention which he desires and is entitled to protect. In such cases it is a rational expectation, based upon common experience, that the worst form of piracy upon a patented invention will be that in which there is, along with the appropriated principle of the invention, the largest departure in form and structure from the form and structure shown in the drawings and described in the specification. Nevertheless, if the principle be appropriated by the infringer, the injury is just as great as if the appropriation had included the form and structure, as well as the substance, of the invention. Of course, in all such cases, while the Office will insist upon as much definiteness in the language of the claims as the statute calls for, it will also, if it properly discharges its function as the protector of the inventor, leave something to the *salutary and benignant agency of construction in the courts.*"

The author of this decision thus admirably states his views derived from a long experience as a patent practitioner before the courts, which views are fully in agreement with the trend of leading court decisions sustaining patents covering meritorious inventions, even when the language of the specification was obscure and when the claims did not cover the invention in the distinct and specific form required by the statute.

It is the purpose of this paper to point out instances showing this liberal construction of patents by the courts, and to show by these instances how the courts endeavor, as best they can, to search out the substance of an invention, disregarding to a certain extent the form in which the document or instrument, termed the patent, is presented to them, and thus in fact become the "salutary and beneficent agency" in upholding valuable property rights in inventions which would otherwise be lost or pirated.

As a prelude to these citations it may be well to state briefly some facts as to the history of the patent grant and how it is regarded by the courts in this country.

Letters patent, as originally granted under the royal prerogative of the sovereigns of England, before the passage of the Statute of Monopolies, conferred exclusive rights upon a few favored subjects to pursue certain trades or to deal in certain manufactures or articles of commerce, and were granted indiscriminately in some cases as marks of special favor, in others for the avowed purpose of raising revenue. These monopolies covered not only articles of foreign importation into the realm but also numerous articles of daily consumption such as salt, oil, iron and paper, and thus constituted a means of oppressive indirect taxation for the benefit of the sovereign and a few favorites. As to inventions, the early letters patent show that the grantee in many cases was not the actual inventor, but merely one who had contributed to its ntroduction, either, in the words of the grant, "by their wit and invention or by their charge and industry." But whether the grant was made to the original inventor or to one who introduced the manufacture forming the subject of the invention from abroad, the main principle upon which the title to the invention rested was its introduction into the realm and not its conception. These early patents were granted for a term of twenty-one years. They contained no provision for insuring to the public the knowledge of the invention. If the grantee kept his secret, he might, in fact, enjoy his monopoly for a much longer period than the term of the grant. Toward the end of the reign of Queen Anne, however, the proviso was inserted in all letters patent requiring the grantee particularly to describe and ascertain the nature of his invention and in what manner the same was to be performed or manufactured. Thus originated the specification of letters patent.

On May, 25, 1624, during the reign of James I, the famous Statute of Monopolies was passed by Parliament, which declared that all monopolies were contrary to the laws of the realm and should thereafter be void and of no effect. It was, however, especially provided that this declaration should not extend to letters patent, heretofore made for the term of twenty-one years or hereafter made for the term of fourteen years, to the true and first inventor or inventors of any manner of new manufactures

within the realm, which others at the time of granting did not use so they be not contrary to the law or mischievous to the state. The statute also provided that the force or validity of these letters patent ought to be and should be thereafter examined, heard, tried, and determined by and according to the *common laws* of the realm and not otherwise.

At the time of the passage of this statute by Parliament, monopoly or anything that savored of monopoly, even in the beneficial form of a grant for a newly discovered invention, was odious to both the courts and the people. This odium persisted toward an inventor, however meritorious, who had obtained a patent and thus became a monopolist dependent for his exclusive rights upon a royal grant in his favor. For this reason, whenever the grant came before the courts for adjudication all rights under the patent were strictly construed against him. Any fault or vagueness in the description of the invention, any deviation or excess of claim from what he had actually disclosed, were eagerly seized upon by the courts and made an excuse for invalidating his patent. One of the most famous inventions in history, the Richard Arkwright spinning frame, invented in 1775, was, after the inventor had enjoyed his exclusive rights for a period of ten years, and amassed a fortune therefrom, brought before the court of the Kings Bench on a writ of *scire facias* to repeal the patent, which recited, among other things, "that although the said Richard Arkwright did cause a certain instrument in writing, under his hand and seal, together with a plan thereof to be enrolled in our High Court of Chancery, pretending particularly to describe and ascertain the nature of his said invention and in what manner the same was to be performed, yet the said Richard Arkwright hath not in and by the said instrument in writing particularly described and ascertained the nature of his invention, but hath neglected so to do contrary to the form and effect of the said letters patent; by means of which premises the said letters patent are and ought to be void and of no force or effect in law."

The decision in this case was directed especially to the inadequacy of the specification in setting forth the invention so that other persons could construct the same,

and was based mainly on evidence of mechanics as to their ability to construct and work the invention from the plans and description of the specification. The verdict of the jury was against the inventor and the patent was declared void.

This method of strict construction of the contents of letters patent against the patentee continued in the English courts until the year 1800 when Lord Eldon, sitting as judge in the case of Cartwright *vs.* Arnett, in that year, first suggested that patents were to be construed in the light of bargains between the inventor and the public, to be adjudicated in accordance with the principles of good faith between the parties in consideration of the inventor having made a fair disclosure of his invention to the public, and thus to be construed as other bargains between two parties.

As showing further the changed attitude of the English courts toward patents, their more liberal interpretation of their contents and disposition to uphold and preserve the property rights covered thereby, I wish to refer particularly to the cases of Neilson *vs.* Hærford and Household Co. *vs.* Neilson (Websters Eng. Pat. Cases), in which the Neilson patent, granted October 1, 1828, for "the improved application of air to produce heat in fires, forges and furnaces" was adjudicated. The Neilson invention consisted in heating air prior to introducing it into a blast furnace whereby it was found that the smelting of ores could be accomplished in much shorter time and with a saving of fuel.

Before this invention the blast was produced by any mechanical means, passed through a regulator, and entered in a cold stream into the furnace; and at this time there was a strong opinion entertained by iron manufacturers that it was better for the purpose of smelting iron that the stream of air should enter the furnace cold, since the air blast was found to work more effectively in winter than in summer.

This invention was stated before the court to be one of the greatest importance, that there had been nothing discovered up to that time which had produced so considerable an effect in one of the greatest industries of the realm; namely, the smelting of iron ore. It had enabled manufacturers to bring into operation new fields

of iron, and coal, that before this discovery had been deemed impossible to apply to the smelting of iron. As to the scope or what was covered by the patent, it was to be understood that the forms and sizes of the vessels in which the air was to be heated might vary; but the patent was considered by the patentee and his solicitors to cover any attempt to pass the air from the blowing power through an air vessel which was heated, and then conducting that heated air into a furnace to be used for smelting purposes.

On the other side against sustaining the patent it was argued that the specification seizes hold of an abstract principle, namely, that hot air produces a hotter fire than cold, and of that abstract principle alone; the patentee purposely avoids any mode of stating how the principle should be applied; hence the patent is bad as being one for a principle alone.

The judge, in his instructions to the jury, in the Neilson *vs.* Harford case, said:

> "Half a century ago or even less, within fifteen or twenty years, there seems to have been very much a practice of both judge and jury to destroy the patent right, even of beneficial patents, by exercising great astuteness in taking objections, either as to the title of the patent, but more particularly as to the specification, and many valuable patent rights have been destroyed in consequence of the objections so taken. Within the last ten years or more the courts have not been so strict in taking objections to the specification; and they have endeavored to hold a fair hand between the patentee and the public, willing to give the patentee on his part, the reward of a valuable patent, but taking care, on the other hand, of the benefit of the proviso which is introduced into the patent for their advantage, so that the right to a patent may be fairly and properly expressed in the specification."
>
> "Upon this occasion," the judge continued, "I have only to invite your attention to the evidence, and to desire you to decide all questions arising upon the specification, without any bias on either side, with no desire to give the public the benefit

> of this patent by tripping it up but fairly to exercise your judgment between the patentee and the public."

The instructions to the jury that followed were to the effect that, if they were of the opinion that a person of competent skill, such as a practical workman who brings the ordinary degree of knowledge and capacity to the subject, could construct an apparatus adapted to carry out the invention, whatever its scope, the patent, nevertheless, would be good though no particular form of apparatus was stated in the specification.

In the second case, Household Co. *vs.* Neilson, before the House of Lords in 1843, Lord Justice Hope in his instructions to the jury said:

> "His invention, then, consists, according to a fair meaning of the specification, taken as a whole and candidly considered, in passing a blast into an air vessel or receptacle, in order to be heated—in order at that stage of the process of application of air to fires, to acquire the agent which he intends to act—heat in the blast, instead of a cold blast. How you heat, in what mode or in what vessel, provided the vessel be strong enough to endure the blast, and of cubical contents of air sufficient for the blast, I neither care nor direct you; for if you so get the hot blast into the furnace by heating the air in a vessel between the blowing engine and the fire, you attain my object; you will get my improved application of air." . . .
>
> "The defenders say—you announce a principle, that hot air will produce heat in a furnace; you direct us to take the blast without interrupting it, to heat it and throw it hot into the furnace. But you tell us no more; you do not tell us how we are to heat it. . . . The defenders say the patent on this account is bad in law. I must tell you, that even taking the patent to be of this general character, that it is good in law. I state to you the law to be, that you may obtain a patent for a mode of carrying a principle into effect; and if you suggest and discover not only the principle but suggest and invent how it may be applied

> to a practical result by mechanical contrivance and apparatus, then you may take your patent for the mode of carrying it into effect, and are not under the necessity of describing and confining yourself to any one from of apparatus."

The jury found for the patentee Neilson, and thus sustained the patent on all the issues.

These extended statements of the Neilson patent cases are made not only to show the changed attitude of the English courts toward inventors and patentees and the broad and liberal construction that finally obtained toward patents, but also for the reason that these cases have exercised a controlling influence upon and have been quoted and followed in the decisions of courts in this country in cases where basic patents were adjudicated, such as O'Reilly *vs.* Morse, Tighlman *vs.* Proctor, and the American Bell Telephone cases, an all of which broad claims for inventions were upheld which covered both the method and means for the application of a principle or natural force in some manner to a physical object, the concrete forms of its embodiment and practical application being held not to be material or necessary to be defined in the claims.

In this country the exclusive rights of the inventor to property in patents, the same that the owner of any other species of property may enjoy, has always been recognized, and the courts in adjudicating patents have generally construed patents liberally on the principle in equity that "property rights may prevail rather than perish." The foundation of these rights of an inventor is, as stated by Walker, the consent of the people of the United States as primarily expressed in the Federal Constitution and elaborately defined in the Federal Statutes. As forcefully stated in the decision of the Court of Claims, in McKeever *vs.* The United States:

> "In this country our organic law recognizes in the clearest terms that mind-work which we term inventions. What immediate reasons operated on the framers of the Constitution seem to be unknown, but it is clear that they had a clear apprehension of the English law, on the one hand,

and a just conception, on the other, of what one of the commentators has termed 'a natural right to the fruits of mental labor.' Instead of placing our patent system upon the English foundation of Executive favor, and conferring that prerogative of the Crown upon the President, they transferred all authority to the legislative department of the government—the department which regulates rights—by placing it among the specially enumerated powers of Congress.

"It is a noticeable fact, which, however, seems to have received little attention, that neither the word 'patent' nor the word 'grant' is used in the Constitution. The words which it does employ, moreover, are unmistakably clear in the intent of its recognition. The language of the English law is, in substance, that the Crown may grant or confer upon the inventor a patent subject to the conditions and limitations which attach by implication to grants from the Crown. The language of the Constitution, on the contrary, confers upon Congress the power of '*securing* to inventors the exclusive right of their discoveries.' Congress is not empowered to grant to inventors a favor but *to secure to them a right.* And the term 'to secure a right' by no possible implication carries with it the opposite power of destroying the right in whole or in part by appropriating it to the purposes of the government without complying with that other condition of the Constitution, the making of just compensation."

These are the views which are generally adopted by the Federal courts in the construction of patents, to the end that the patent should always be liberally interpreted in favor of the patentee; for the reason that a patent represents actual property the extent and title to which are neither to be limited or disturbed during the term of its existence, upon any doubtful grounds.

Early in the last century, about 1828, the case of Grant *vs.* Raymond came before the Supreme Court, which involved the question of the power of the Secretary of State to receive the surrender of a patent, cancel the

record thereof, and issue a new patent for the unexpired part of the original term of fourteen years, when a defect was found to exist in the original patent, said defect being the result of an inadvertent error on the part of the patentee and without any fraud or misconduct on his part.

Chief Justice Marshall, who delivered the opinion of the court, said in part:

> "The communciation of the discovery to the public has been made in pursuance of law, with the intent to exercise the privilege which is the consideration paid by the public for the future use of the machine. If, by an innocent mistake, the instrument introduced to secure this privilege fails in its object the public ought not to avail itself of this mistake and to appropriate the discovery without paying the stipulated consideration. The attempt would be disreputable in an individual, and a court of equity might interpose to restrain him."

The rulings of the court in this case sustained the right of the government to reissue amended patents and were afterward embodied in legislation, providing thereby a method by which defective patents could be cured and the patentee protected to the full measure of his rights for the remainder of the term of the patent.

The beneficial adjudication of the courts in aiding a foreign inventor to obtain the full measure of his rights by reissue was never more clearly evidenced than in the case of *In re* Heroult, decided in the Court of Appeals D. C., in 1907. Heroult, a citizen of France, invented and obtained a French patent for a new and valuable electrical process for obtaining soft metals and a furnace for carrying out the process. The patent issued in this country for a single claim covering specifically the furnace structure. An application for reissue containing process claims together with the single apparatus claim was rejected by the office and thereafter taken on appeal to the court. The oath accompanying the application stated that the patent granted was inoperative for the reason that the specification was defective in the failure

of the claim to describe applicant's real invention. The court held it to be apparent that the patent if issued covering the furnace alone was of little or no practical value and that there was no question but that the process was both novel and valuable, and ruled that a reissue could be granted *covering both the method and the apparatus.*

Joinder of inventions, such as permitted in the case just cited, where the inventions are kindred and auxiliary, is the general rule in the courts. Separate patents covering machines can be joined in one suit if it be shown that they are capable of conjoint use. Also, as stated in Robinson, the courts allow a process to be embraced in the same patent with the apparatus by which it is performed and the product in which it results, where all originate in the inventive genius of the same inventor, although the process, the apparatus, and the product are so far separable from each other that the process might be otherwise performed, the apparatus otherwise employed, and the product otherwise produced. In a recent decision by the Circuit Court of Appeals, in Century Electric Co. *vs.* Westinghouse Electric Co., of October 27, 1914, it was held that:

> "One who makes several patentable inventions that produce a new and useful process or machine, or both, pertaining to the same subject-matter has the option to take one patent therefor or as many separate patents therefor as he makes patentable inventions."

The Supreme Court, in the case of Steinmetz *vs.* Allen, while admitting the right of the Commissioner of Patents under the statute to establish regulations not inconsistent with law for the conduct of proceedings in the Patent Office, held that since the statute gave the right to join inventions in one application where the inventions are related, such a right can not be denied by a hard and fixed rule, such as rule 41, as it then existed, which prevented joinder in all cases of process and apparatus. This provision of the rule was held to be invalid, since it was mandatory in character and entirely ignored the differences existing between cases covering process and

apparatus, which would justify the exercise of discretion in permitting joinder. There is no question but that Rule 41, as it existed, made the practice of the Office on the question of division more simple and uniform, but the court in holding this rule to be invalid recognized the principle that Office rules and decisions can not be so interpreted and enforced as to restrict the right of an inventor to fully protect his invention by a single comprehensive patent, and also the right of appeal to the highest court if necessary, in his efforts to determine and obtain the full measure of his rights under his patent.

It is evident from the trend of leading decisions that the courts are desirous of sustaining patents covering basic and meritorious inventions, even though the claims are incomplete and functional, and the invention covered therein apparently fully anticipated in the prior art. The rule as stated in a recent decision of the circuit court of appeals is followed, to the effect that:

> "A patent is a contract and the rules for the construction of contracts generally control in its interpretation; and when the terms are plain and the invention of the parties clearly manifest, they must prevail; but if its expressions are ambiguous, or the validity of any claim is doubtful, that construction will be given which will sustain rather than destroy the patent."
>
> Denning Wire & Fence Co. *vs* American Steel & Wire Co., 1909.

In a number of decisions sustaining doubtful but meritorious patents when attacked by infringers, it will be found that reliance is placed on the dictum of Justice Bradley in Webster Loom Co. *vs* Higgins, decided in 1882, to the effect that:

> "It may be laid down as a general rule, though not an invariable one, that if a new combination or arrangement of old elements produce a new and beneficial result never attained before, it is evidence of invention. It was certainly a new and useful result to make a pile fabric loom produce fifty yards a day where it never before had produced more than forty, and we think that the

> combination of elements by which this was effected, even if these elements were separately known before, was invention sufficient to form the basis of a patent."

In sustaining the validity of a patent for a method of mixing molten metal in the case of the Carnegie Steel Co. *vs* The Cambria Iron Co. in 1902, the utmost liberality was shown by the court in brushing aside all the anticipating prior art cited although pertaining to the same art of manufacturing steel. The Bessemer process of purifying iron by blowing air through a molten mass of pig-iron in a converter and subsequently partially recarbonizing it to a degree necessary to convert it into steel, was found to be defective in that the output from the blast furnaces yielded products of steel, such as rails and beams, which were irregular and uncertain in their final condition, some sound, others of imperfect strength and full of flaws. .This was remedied by providing a reservoir of such size and strength as to receive supplies from the various furnaces, and so regulated that in delivering supplies of molten iron to be carried to the converters for manufacture into steel rails, the supply could not be wholly emptied, and this remainder, which was successively added to from various furnaces, by the well known law of diffusion of liquids, was thus made uniform in quality and chemical composition. This invention was set forth in claims as "an art of mixing molten metal to secure uniformity in its constituent parts preparatory to further treatment." The prior devices were admitted to show reservoirs between the blast furnaces and the converters used for storage and admittedly for such necessary steps as would *incidently* produce uniformity in the mixture, but none of them showed the retention of a considerable quantity of metal in the reservoir as a prerequisite to that uniformity which it had been the constant effort of manufacturers to secure. It was held that a process patent, such as that under consideration, was not anticipated by mechanism which might with slight alterations have been adapted to carry out the process, and that the mere possession of an instrument or mechanism contains no suggestion of all the possible processes to which it may be adapted. In this connection a similar holding in the case of New

Process Fermentation Co. *vs.* Maus was quoted. Reference was also made to the fact that this process was not accidentally discovered but was the result of a long search for the very purpose, and when it was found it was a surprise to the manufacturers of steel to ascertain that it was but a step from what they knew to that which they had spent years in endeavoring to find out, and that now it only remains for that wisdom which comes after the fact to teach that the patentee discovered nothing, invented nothing, accomplished nothing.

When in cases like this the courts strive to maintain the validity of patents which show results in improvement in quality or increased production over apparently identical devices and processes in the same art, there is no question but that they would deem valid those patents covering devices in which a new and improved result was obtained from the adaptation of means to a new purpose, although nearly identical in form and structure, as is shown by the liberal construction placed upon patents of this class in the cases of Hobbs *vs.* Beach and Potts *vs.* Creager.

Functional claims, especially in the case of pioneer patents which represent the infancy of an art and introduce to the public some art or instrument entirely new, are generally construed by the courts as liberally as the language of the specification will permit, the function or result covered broadly by the words "means" or "mechanism" being construed to cover the devices or apparatus effecting the result.

The case of Morley Sewing Machine Co. *vs.* Lancaster, decided by the Supreme Court in 1889, is frequently quoted in such cases, and is referred to by the Commissioner Mitchell in the Pacholder case above cited in the following language:

> "If the abundant use of the words 'means,' 'mechanism,' or 'appliances' in claims can invalidate them in view of the statute which requires the applicant to 'particularly point out and distinctly claim the part, improvement or combination which he claims as his invention or discovery' it will be conceded that the claims of Morley were void for indefiniteness. . . . It is impossible to avoid the conclusion that if Morley had

> been held to the doctrine that such words may not be used in claims, when suitably qualified, he would have been unable to hold as an infringer one who appropriated the principle of his invention disguised in an organization different from that which he showed in his patent in every other respect."

Such a construction of a functional claim was also adopted in the case of The Swain Turbine and Manufacturing Co. *vs.* Todd, in 1877, when the court said:

> "To uphold these claims they must not only be construed in connection with the described means of the reissue, but also so construed as not to embrace any invention broader in its scope then the invention described or substantially suggested or indicated in the original."

Also in the case of Von Schmidt *vs.* Bowers, of 1897, the court held that:

> "The Bowers' patents disclose and cover inventions of a pioneer character, standing at the head of the art, and their claims are entitled to a broad and liberal construction. Said claims are not to be limited to any particular form or construction of elements which make up the combinations, but they are broad generic claims without any limitation as to the form of construction of the particular elements; and all subsequent machines which employ substantially the same means to accomplish the same results are infringements."

Also on the consideration of the Brush patent before the court in 1890, in the case of the Brush Electric Co. *vs.* The Western Electric Light and Power Co., the first claim alleged to be infringed read as follows:

> "In an electric lamp, two or more pairs or sets of carbons with mechanism constructed to operate said pairs dissimultaneously or successively."

The prominent feature of this invention was the use of the double set of carbons in such a manner that when the

first pair is consumed the electric arc is automatically established between the second pair which continues until they are consumed. This claim and other claims of similar import were upheld by the court against all objection to their alleged functional character and all alleged anticipations by other patents.

A marked deviation from this practice is shown in the construction given to the broad functional claim of the Westinghouse patent in the case of the Boyden Power Brake Co. *vs.* Westinghouse before the Supreme Court in 1898, in which the dilemma was presented to the court of upholding a claim which was deemed to cover merely the function of admitting air to the brake cylinder directly from the train pipe, or permitting the alleged infringer to escape by construing the claim as limited to the particular means described in the specification for performing the function. The latter view was adopted, and a decree of non-infringement rendered, although with a dissenting opinion of four judges. The court said in part:

> "We have no desire to qualify the repeated expressions of this court to the effect that, where the invention is functional, and the defendant's device differs from that of the patentee only in form, or in rearrangement of the same elements in a combination, he would be adjudged an infringer, even if, in certain particulars, his device be an improvement upon that of the patentee. But, after all, even if a patent for a machine be a pioneer, the alleged infringer must have done something more than reach the same result. He must have reached it by substantially the same or similar means, or the rule that a function of a machine can not be patented is of no practical value. To say that the patentee of a pioneer invention for a new mechanism is entitled to every mechanical device which produces the same result is to hold that he is entitled to patent his function. Mere variation of form may be disregarded, but the substance of the invention must be there. . . . Conceding that the functions of these two devices are practically the

> same, the means used in accomplishing the functions are so different, that we find it impossible to say, even in favor of a primary patent, that they are mechanical equivalents."

The dissenting opinion, however, in conformity with prior decisions of the courts, was briefly as follows:

> "It is not an unwarrantable extension of the term to speak of the invention in suit as a *pioneer*, since it is practically conceded in this case and justly stated by the court below to be 'one of the highest value to the public,' and conspicuously one 'which entitles the proprietor to a liberal protection from the courts in construing the claim.' The very fact that this invention resulted in placing it within the power of an engineer running a long train to stop in about half the time and half the distance within which any similar train had been stopped is certainly deserving of recognition. The claims of such patents have from time out of mind been allowed a liberal construction, and considered as entitled to the fullest benefit of mechanical equivalents. . . .
>
> "Being of a character so described as a pioneer, the patent in suit is entitled to a broad and liberal construction. In other words the invention is not to be restricted narrowly to mere details of the mechanism described as a means of carrying the invention into practical operation."

Where the invention covered in the patent being adjudicated is not of such character as to entitle it to a broad construction the rule stated by the Supreme Court in the case of Cimiotti Unhairing Co. *vs.* The American Fur Refining Co., decided in 1905, prevails to the effect that:

> "A greater liberality and a wider range of equivalents are permitted when the patent is of a pioneer character than when the invention is simply an improvement, and may be the last successful step in the art, theretofore partially developed by other inventors in the same field."

In accordance therewith, it was—

> "*Held*, that the patent in suit discloses an invention of merit entitled to some range of equivalents in determining the question of infringement, but it is not one of those broad initiative inventions where original thought has been embodied in a practical mechanism which the courts have ever been zealous to protect and to which a wide range of equivalents has been accorded."

Accordingly, in cases of this character, the courts look to the language of the claims, and in construing these claims the scope thereof may often be restricted by the description but it can never be enlarged. Here comes into consideration the record of the case as made up in the Patent Office, and the rule obtains that, when a claim is deliberately restricted in its terms by amendment after its rejection by the Patent Office in order to obtain a patent, the patentee can not consistently ask the court to construe such limited claim as if it were the broad rejected claim.

An instance in point is the case of the United States Repair and Guaranty Co. *vs.* The Assyrian Asphalt Company before the Supreme Court in 1902, in which the patentee tried to hold an infringer upon a claim for a method of repairing asphalt pavements, which consisted in subjecting the spot to be repaired to heat, then adding new material and smoothing and burnishing it. This method claim the court held to be invalid in view of the prior art shown in patents and publications, although the patentee was found to use new means, namely, *a blast of heat*, for softening the edges of the old asphalt in order to make a bond with the new material. The specification, however, stated that:

> "The heating of the surface may be accomplished in various ways and by means of various forms of apparatus,"

and the claim included broadly the step of "subjecting the spot to be repaired to heat."

In decreeing the invalidity of this broad method claim, the court said:

> "Another objection to the proposed limitation of the claim by making it read 'a blast of heat,' or 'a strong blast of heat' in lieu of the unqualified word 'heat' is in the fact that the third claim which contained the additional words was withdrawn by the patentee upon a ruling or declaration of the Patent Office that the first and third claims were the same in substance and could not both be permitted to remain in the case. This was not a mere casual expression of opinion by an examiner, but was in effect a requirement that one of the claims be withdrawn, and no reason is perceived for not applying the ordinary rule. Having voluntarily abandoned the claim for a method limited to the use of 'a blast of heat,' the patentee may not now insist that a broad claim, containing no suggestion of such intention, shall nevertheless be subjected by construction to the same restriction. . . . It is not within the rightful power of the courts to enlarge or restrict the scope of patents which by mistake were issued in terms too narrow or too broad to cover the invention, however manifest the fact and extent of the mistake may be shown to have been."

The teaching of this decision as applied to office practice is that, in the treatment of applications, particular attention should be directed to the proper scoping of claims. As in this case, slight variations of expression between claims may be of importance, and a specific claim containing this variation should not be rejected on a broader one since the specific claim may be the only one available to save the patent upon adjudication and hold an infringer.

Without indicating further the special rules of construction adopted by the courts in the interpretation of patents, or multiplying instances showing that the construction placed upon them is usually most liberal when novel and meritorious inventions are involved in

order to sustain a patent, it only remains to recommend this same spirit of liberality in the construction and allowance of claims for what are ascertained to be new and important inventions, with the knowledge that, if the invention possesses merit, an error in liberality of allowance is one that can readily be corrected by the interpretation of the court, based on the specification and drawing, as to the real scope of the invention, or that such errors can easily be remedied by the beneficial provision of disclaimer, whereas, undue restriction of claims by the Office and acquiescence therein by the inventor may constitute a fatal defect in the patent granted on the application, which, if the claims are clearly expressed, can not be remedied by an enlargement of scope by the court in a subsequent suit for infringement of the patent.

March 18, 1915.